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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Robert Powers et al.
Serial No. : 09/942,055
Filed : August 29, 2001
Title : STRUCTURE OF A FREE REGULATOR OF G-PROTEIN SIGNALING (RGS4)
AND METHODS FOR IDENTIFYING AGONISTS AND ANTAGONIST
USING SAME

Art Unit : 1631
Examiner : Channing S. Mahatan

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Applicant submits the references listed on the attached form PTO-1449.

This statement is being filed after a first Office action on the merits, but before receipt of a final Office action or a Notice of Allowance. A check for \$180 in payment of the late submission fee of §1.17(p) is enclosed. Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: May 17, 2004

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Substitute Form PTO-1449 (Modified) MAY 19 2004 PATENT & TRADEMARK OFFICE (37 CFR 1.98(b))	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 16163-021002	Application No. 09/942,055
	Information Disclosure Statement by Applicant (Use several sheets if necessary)		
	Applicant Robert Powers et al.		Filing Date August 29, 2001 Group Art Unit 1631

U.S. Patent Documents

Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA						

Foreign Patent Documents or Published Foreign Patent Applications

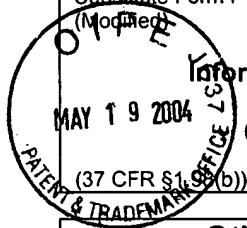
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	AB							

Other Documents (include Author, Title, Date, and Place of Publication)

Examiner Initial	Desig. ID	Document
	AC	Arshavsky & Pugh, (1998) <i>Lifetime Regulation of G Protein-Effector Complex: Emerging Importance of RGS Proteins</i> , Neuron, 20:11-14
	AD	Clore, et al., (1989), <i>Determination of Three-Dimensional Structures of Proteins and Nucleic Acids in Solution by Nuclear Magnetic Resonance Spectroscopy</i> , Crit Rev Biochem Mol Biol, 24(5):479-564
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	AF	Hepler, et al., (1997) <i>RGS4 and GAIIP are GTPase-Activating Proteins for G_q and Block Activation of Phospholipase Cβ by γ-thio-GTP- G_q</i> , PNAS, 94:428-432
	AG	Hepler, et al., (1999) <i>Emerging Roles for RGS Proteins in Cell Signalling</i> , TiPS 20(9):376-382
	AH	Hunt, et al., (1996) <i>RGS10 is a Selective Activator of G_q, GTPase Activity</i> , Nature, 383:175-177
	AI	Koelle & Horvitz, (1996) <i>EGL-10 Regulates G Protein Signaling in the C. elegans Nervous System and Shares a Conserved Domain with Many Mammalian Proteins</i> , Cell, 84:115-125
	AJ	Laskowski, et al., (1993) <i>PROCHECK: A Program to Check the Stereochemical Quality Of Protein Structures</i> , J. Appl. Cryst., 26:283-291
	AK	Natochin, et al., (1998) <i>Mutational Analysis of the Asn Residue Essential for RGS Protein Binding to G-Proteins</i> , J. Biol. Chem., 273(12):6731-6735
	AL	Nilges, et al, (1988) <i>Determination of Three-Dimensional Structures of Proteins from Interproton Distance Data by Hybrid Distance Geometry-Dynamical Simulated Annealing Calculations</i> , FEBS Lett., 229(2):317-324
	AM	Posner et al., (1999) <i>Modulation of the Affinity and Selectivity of RGS Protein Interaction with G_q Subunits by a Conserved Asparagine / Serine Residue</i> , Biochemistry, 38:7773-7779
	AN	Sprang, S. R., (1997) <i>G Proteins, Effectors and GAPs: Structure and Mechanism</i> , Curr Opin St. Biol., 7:849-856
	AO	Tesmer & Sprang, (1998) <i>The Structure, Catalytic Mechanism and Regulation of Adenylyl Cyclase</i> , Curr. Opin. Structural Biol., 8:713-719
	AP	Wall, et al., (1998) <i>Structural Basis of Activity and Subunit Recognition in G Protein Heterotrimers</i> , Structure, 6:1169-1183

Examiner Signature	Date Considered
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Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 16163-021002	Application No. 09/942,055
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.937-3(b))		Applicant Robert Powers et al.	
		Filing Date August 29, 2001	Group Art Unit 1631


Other Documents (include Author, Title, Date, and Place of Publication)

Examiner Initial	Desig. ID	Document
	AQ	Wuthrich, et al., (1983) <i>Pseudo-structures for the 20 Common Amino Acids for Use in Studies of Protein Conformations by Measurements of Intramolecular Proton-Proton Distance Constraints with Nuclear Magnetic Resonance</i> , J. Mol. Biol., 169(4):949-961
	AR	Zuiderweg, et al., (1990) <i>Three-Dimensional ¹³C-Resolved Proton NOE Spectroscopy of Uniformly ¹³C-Labeled Proteins for the NMR Assignment and Structure Determination of Larger Molecules</i> , J. Mag. Reson., 86:210-216

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